

Recovery Plan Action Status

Plan Name: Gila/Yaqui Topminnow (2 ssp.)

Plan Status: Final

Plan Date: 30-Jan-06

Lead Agency: USFWS

Lead Office: Arizona Ecological Services Field Office

(2602)

(242-0210)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	1.1	Maintain refuge populations of natural populations to ensure survival of the species.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Fish and Wildlife Service, Division of Realty, U.S. Forest Service, The Nature Conservancy, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , San Carlos Apache Indian Reservation	Management: Propagation	Contract	Fish collected from Cottonwood Spring to create new refuge for that lineage.
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	1.2	Designate critical habitat for Gila topminnow which will include, as a minimum, all natural populations.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division	Work type not yet selected	Labor type not yet selected	no plans to designate CH
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	1.3	Identify extent of geographic distribution of natural and long-lived reestablished populations including natural populations for which existence is in doubt.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , San Carlos Apache Indian Reservation	Research: Population Surveys	Contract	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	1.4	Protect habitats occupied by natural and long-lived reestablished populations from detrimental land and water use practices.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Fish and Wildlife Service, Division of Realty, U.S. Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , San Carlos Apache Indian Reservation	Acquisition, Management	Contract	
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	1.5	Protect remaining natural and long-lived reestablished populations from invasion by detrimental nonnative aquatic species.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , Arizonal State and County Health Departments, San Carlos Apache Indian Reservation	Acquisition, Management: Predator and Competitor Control, Other: Law Enforcement	Internal Administrative	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	1.6	Prohibit the introduction or release of nonnative aquatic species detrimental to Gila topminnow into areas occupied by natural or long-lived reestablished populations.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, New Mexico Department of Game and Fish, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau of Reclamation , Arizonal State and County Health Departments, San Carlos Apache Indian Reservation	Other	Internal Administrative	
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	1.7	Design And implement site specific management plans for natural and long-lived reestablished populations.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, New Mexico Department of Game and Fish, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , San Carlos Apache Indian Reservation	Management	Contract	
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	1.8	Determine minimum viable population.	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division	Management, Research: Demographic Studies, Research: Genetics	Labor type not yet selected	Population Viability Analysis.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	2	2.1	Identify habitats suitable for reintroduction of Gila topminnow.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , San Carlos Apache Indian Reservation	Management: Reintroduction	Labor type not yet selected	
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	2.2	Reestablish Gila topminnow in suitable habitats following geographic guidelines.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , San Carlos Apache Indian Reservation	Acquisition, Management, Management: Habitat Maintenance and Manipulation, Management: Reintroduction, Other: Information and Education, Research: Habitat Requirements, Research: Habitat Status, Research: Management Techniques	Internal Field Assistance, Internal Technical Assistance	
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	2.3	Protect habitats suitable for reestablishment from detrimental land and water use practices.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Fish and Wildlife Service, U.S. Forest Service, The Nature Conservancy, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , San Carlos Apache Indian Reservation	Acquisition, Management, Other: Information and Education, Other: Law Enforcement, Other: Regulations	Labor type not yet selected	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	2.4	Protect habitats of reestablished or potential populations from detrimental nonnative aquatic species.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , San Carlos Apache Indian Reservation	Acquisition, Management, Other: Information and Education, Other: Law Enforcement, Other: Regulations	Labor type not yet selected	
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	2.5	Prohibit the introduction and release of nonnative aquatic species into areas occupied by reestablished populations or identified as potential habitat for reestablished populations.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , San Carlos Apache Indian Reservation	Management, Other: Information and Education, Other: Law Enforcement, Other: Regulations	Labor type not yet selected	
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	2.6	Design and implement site specific management plans for all reestablished populations.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , San Carlos Apache Indian Reservation	Management: Planning	Internal Technical Assistance	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	3.1	Develop standardized population and habitat monitoring protocols and implement them.	Partially Complete	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Forest Service, New Mexico Department of Game and Fish, The Nature Conservancy, Arizona Game and Fish Department, Bureau Land Management, Bureau of Reclamation, San Carlos Apache Indian Reservation	Management: Population Monitoring, Research: Population Surveys	Labor type not yet selected	<p>Monitoring protocol established. Annual SBNWR October monitoring has shown that populations have remained stable with the implementation of habitat improvements. Included in this annual monitoring is HCP monitoring for the El Coronado Ranch at Turkey Creek in the Chiricahua Mountains and supplemental monitoring of the Douglas High School Pond and the Bar Boot Ranch.</p> <p>For annual monitoring on San Bernardino NWR and Leslie Canyon NWR in 2009 Percent Habitat Occupied (PHO) for Gila purpurea was .50858 for all impoundments, up from .35146 in 2008, and .88925 for Poeciliopsis sonoriensis, up from .65716.</p> <p>Ictalurus pricei were captured in two of the three known impoundments in 2009-2010; House Pond, at the Slaughter Ranch; and Big Tank at El Coronado Ranch. No I. pricei were captured on SBNWR</p> <p>In addition to the annual monitoring the refuge also monitors for infestation rates of Asian tapeworm in</p>

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
										<p>G. purpurea. Rates from current monitoring show a 74% rate of occurrence in sampled fish and a 100% rate of occurrence in wetlands surveyed. Even with these rates of occurrence, it is believed that Asian tapeworm is having very little, if any effect on survivability of G. purpurea, based on data from annual monitoring.</p> <p>Cyprinella formosa are now found in four impoundments on SBNWR and monitoring showed breeding had taking place in two of the four impoundments.</p> <p>Monitoring at the Bar Boot Ranch, where P. sonoriensis and G. purpurea were stocked last year, with the implementation of a Safe Harbor Agreement showed a PHO of .5806 for G. purpurea with many juveniles present. It should be noted that in addition to the stocking done on the ranch with fish from refuge impoundments, 2500 G. purpurea were trans-located to the ranch as part of a salvage effort from the El Coronado Ranch. There were no P. sonoriensis observed.</p>

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
										<p>A report on the monitoring of EI Coronado Ranch is available from the Fish and Wildlife Conservation Office in Pinetop.</p> <p>Annual monitoring of POOCOC done by AGFD at all sites not on the NWR.</p> <p>No report has been obtained for Mexican populations</p>
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	3.2	Maintain a population and habitat database and generate annual reports.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Forest Service, New Mexico Department of Game and Fish, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation	Management	Labor type not yet selected	A report on the monitoring of EI Coronado Ranch is available from the Fish and Wildlife Conservation Office in Pinetop. A 2 year study was completed on the most recent Hay Hollow Pond to measure for vegetation succession and fish propagation. Report available at the Refuge Headquarters.
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	1	3.3	Implement criteria for declaring reestablished populations as extirpated.	Complete	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , San Carlos Apache Indian Reservation	Management, Management: Reintroduction, Other: Administration	Labor type not yet selected	Criteria set and implemented.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	2	4.1	Facilitate genetic exchange among reestablished populations if needed.	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , San Carlos Apache Indian Reservation	Management: Other	Labor type not yet selected	Some populations augmented.....
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	2	4.2	Conduct additional genetic studies of natural and reestablished populations.	Discontinued	FY 2005		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Forest Service, The Nature Conservancy, Arizona Game and Fish Department , Bureau Land Management , San Carlos Apache Indian Reservation	Research: Genetics	Labor type not yet selected	genetics research stopped. Full species status needs to be recognized officially under ESA.
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	2	5	Study life-history, genetics, ecology, and habitat of Gila topminnow and interactions with nonnative aquatic species.	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Forest Service, U.S. Fish and Wildlife Service, Fisheries Resource Division, Arizona Game and Fish Department , Bureau Land Management	Research	Labor type not yet selected	AGFD finished study on topminnow/pupfish stocking strategies

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Gila topminnow (incl. Yaqui) (Poeciliopsis occidentalis)	3	6	Inform and educate the public and resource managers.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Parks, U.S. Forest Service, The Nature Conservancy, Arizona Game and Fish Department , Bureau Land Management , Bureau of Reclamation , U.S. Fish and Wildlife Service, Division of External Affairs, San Carlos Apache Indian Reservation	Other: Information and Education	Labor type not yet selected	Duration is 15-20 years and ongoing.